



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

EPA Region 5 Records Ctr.



253560

REPLY TO THE ATTENTION OF:

HSE-5J

MEMORANDUM

DATE: OCT 14 1994

SUBJECT: Request for a Time Critical Removal Action at the
Sanitary Transfer and Landfill Site, Delafield, Waukesha
County, Wisconsin

FROM: Brad Benning, On-Scene Coordinator
Emergency Response Section II

TO: Richard Karl, Chief
Emergency & Enforcement Response Branch

Site ID# 2U

I. PURPOSE

The purpose of this memorandum is to obtain your approval to expend up to \$45,440 to conduct a time critical removal action at the Sanitary Transfer and Landfill site (STL), an inactive, closed landfill located in Delafield, Wisconsin. A removal action is necessary to eliminate the immediate threat to the public health and the environment from exposure to elevated levels of manganese detected in private wells utilized for drinking water downgradient of the site. The proposed action would provide alternative water supplies to the affected residents to prevent the ingestion of water contaminated with unacceptable levels of manganese.

The CERCLIS ID number for this site is WID988610176.



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II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal site evaluation

A time critical removal is necessary to eliminate the immediate threat posed by manganese concentrations in private wells above the Removal Action Level (RAL) guidance of 200ppb. On February 17, 1994, a limited site assessment was conducted to confirm a contaminant plume downgradient of the site. Twelve (12) private wells were sampled around the perimeter of the landfill. Three (3) wells north/northwest of the site had levels of manganese above the proposed MCL and RAL of 200 ppb which justifies a removal action to provide an alternative water source.

2. Physical location

The STL facility is located in Delafield, Wisconsin, approximately 20 miles west of Milwaukee, at the intersection of Interstate Highway 94 and Route 83. The site occupies the southwest quarter of the northwest quarter of section 21, T.7N., R.18E.

3. Site characteristics

The STL site is located on approximately 138 acres and at the time of closure, the area of waste disposal occupied 35 acres. The property, as well as the area of waste disposal, is L-shaped. The disposal area is located along the northern and western portions of the property.

The landfill, which originally operated as a sand and gravel excavation site, began accepting waste about 1955, prior to the State licensing of solid waste facilities. In 1969, the 138 acres were licensed by the WDNR to allow the disposal of garbage, trash, industrial, commercial, and demolition material. The landfill was privately owned and operated, and at the time of closure in 1982, approximately 2.5 to 3 million cubic yards of waste is estimated to have been disposed.

The site is unfenced, and is bordered on the south, southeast, and west by residential development, with the closest house at 180 feet from the site. Immediately north of the site is a frontage road with commercial development and Interstate Highway 94.

As the site was developed, portions of the site were lined, and a leachate collection system was installed for the lined portion of the site. In 1982, WDNR granted conditional approval of the site closure which also included installation of a gas extraction system.

Significant problems regarding site operations and groundwater contamination at the site since the mid-1970s have resulted in

numerous state actions to eventual closure in 1982, with the owner continuing maintenance and monitoring until 1991, when bankruptcy was declared.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Analytical results from the site assessment have confirmed that three private wells are contaminated with manganese above the RAL limit of 200ppb.

PW-96	N15 W30921 Hwy CCC	420ppb
PW-97*	2831 Hwy CCC	620ppb
PW-98*	2715 Clover	620ppb
PW-99	2711 Clover	700ppb

*PW-97 and PW-98 share a common well

Monitoring wells and leachate samples have indicated high levels of manganese at the site, which would correspond to the contamination of these downgradient private wells. The upgradient well, which could be considered the background sample had a manganese level of 15 ppb.

5. NPL status

This site is not on the National Priority List (NPL).

In June 1993, the WDNR submitted to the Region for review an HRS scoring package with a score above 28.5. The HRS package is still under review.

B. Other Actions to Date

1. Previous actions

The United States Environmental Protection Agency (U.S. EPA) conducted the site assessment at the request of the WDNR, utilizing the Superfund Accelerated Cleanup Model (SACM) to expedite the Superfund process and take early actions to reduce risks. The assessment confirmed that private wells downgradient of the STL site are being impacted by a manganese plume.

2. Current actions

Negotiations are underway with the site owner to provide an alternative water supply to the affected homes, through bottled water or installation of an appropriate filter system.

C. State and Local Authorities' Roles

1. State and local actions to date

Since 1977, the WDNR has attempted to close the site due to poor operations and contamination problems from the site. By 1979, the site owner was required by the WDNR to replace contaminated water supply wells with deeper wells to serve several residents in an adjacent subdivision. The WDNR pursued enforcement actions at the STL site until its closure in 1982. In 1991, the WDNR received notice that the site corporation had exhausted its financial resources and would no longer be able to conduct remedial actions/maintenance at the site. WDNR implemented a short-term emergency contract to provide minimum maintenance of the site, including pumping of the leachate collection system, road repair, groundwater monitoring, and limited cap repair.

2. Potential for continued State/local response

The WDNR has exhausted all State authorities, and will not be able to continue emergency maintenance at the site indefinitely. At this point, WDNR is seeking Superfund authorities and liability law to identify a broader group of responsible parties to help finance the remediation of the site.

III. **THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

A. Threats to Public Health or Welfare

The conditions at the STL site meet the criteria for a removal action as stated in the National Contingency Plan (NCP), Section 300.415(b)(2).

- * Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations or the food chain.

The presence of Manganese at or above RALs in residential wells represents a potential threat to nearby populations according to the Agency for Toxic Substances and Disease Registry (ATSDR). Studies have shown that people who drink water with above average levels of manganese experience weakness, stiff muscles, skin and eye irritation, and trembling hands. Studies have also shown that very high levels of manganese in food or water can cause changes in the brain which may potentially result in permanent brain injury, and an increased probability of birth defects.

- * Actual or potential contamination of drinking water supplies.

Twelve (12) private wells around the perimeter of the site were sampled during the site assessment. Results indicated that three

(3) wells north/northwest of the site have levels of manganese above the proposed MCL and RAL of 200ppb. This confirms previous data that indicates a downgradient manganese plume in the groundwater. U.S. EPA derived a No Observed Adverse Effect Level (NOAEL) of 200ppb in potable water. The pathway of concern is ingestion of contaminated water, residents that utilize their well water for drinking would be the primary receptors.

IV. ENDANGERMENT DETERMINATION

Currently three (3) residential wells have been impacted and exceed the proposed MCL and RAL for manganese, due to a downgradient plume being released by the STL site. Actual or threatened releases of pollutants and contaminants from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Actions at the STL site will be limited to providing an alternative water supply to affected residential wells that exceed the RAL of 200ppb. Proposed actions include:

1. Providing bottled water on a temporary basis
2. Installation of a filtering system
3. Providing connection to a public supply system

2. Contribution to remedial performance

The proposed action will not impede future responses based upon available information.

3. Description of alternative technologies

This action will not require any disposal of hazardous substances.

4. EE/CA

Not applicable for a time critical removal.

5. Applicable or relevant and appropriate requirements (ARARs)

Federal ARARs determined to be applicable for the site are the Safe Drinking Water Regulation, identifying a proposed Maximum Contaminant Level (MCL) of 200ppb. WDNR identified a public welfare standard of 50ppb which is the same as the Secondary MCL utilized for the aesthetic quality of the water. All applicable or relevant and appropriate requirements (ARARs) will be complied with to the extent practicable.

6. Project schedule

It is estimated that the removal action will require 10 eight-hour on-site working days.

7. Post Removal Site Control

The OSC has begun planning for provisions of post-removal control. Operation and maintenance of filters will be the responsibility of the homeowner, and bottled water will be utilized only if hook up to the public water supply is imminent.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

B. Estimated Costs

Extramural Costs:

Extramural Cleanup Contractor (See Attachment II)	\$ 25,000
20% Contingency	<u>5,000</u>
Subtotal	\$ 30,000
Total TAT	\$ 5,000
Subtotal, Extramural Costs	\$ 35,000
Extramural Costs Contingency (20% of Subtotal, Extramural Costs; round to nearest thousand)	\$ 7,000
TOTAL EXTRAMURAL COSTS	\$ 42,000

Intramural Costs:

USEPA Direct Costs [\$30 x (40 Regional hrs+4 HQ hrs)]	\$ 1,320
USEPA Indirect Costs (\$53 x 40 Regional hrs)	<u>2,120</u>
TOTAL INTRAMURAL COSTS	\$ 3,440
TOTAL REMOVAL PROJECT CEILING	\$ 45,440

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE
DELAYED OR NOT TAKEN**

Failure to take the proposed action at the STL site would pose an imminent and substantial threat of direct contact with pollutants and contaminants by nearby human populations, through ingestion of contaminated water.

VII. OUTSTANDING POLICY ISSUES

No significant policy issues are associated with the STL site.

VIII. ENFORCEMENT

The PRP's have been identified and appear unable to perform the required removal action. For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential addendum (Attachment I).

IX. RECOMMENDATION

This decision document represents the selected removal action for the Sanitary Transfer and Landfill (STL) site, located in Delafield, Wisconsin, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site (Attachment III).

Conditions at the site meet the NCP section 300.415(b)(2) criteria for a removal, and I recommend your approval of the proposed removal action. The total project ceiling if approved will be \$45,440. Of this, up to \$37,000 may be used for extramural cleanup contractor costs.

APPROVED:

Richard Karl
RICHARD KARL, CHIEF
EMERGENCY & ENFORCEMENT RESPONSE BRANCH

DATE: 10-14-94

DISAPPROVED:

RICHARD KARL, CHIEF
EMERGENCY & ENFORCEMENT RESPONSE BRANCH

DATE: _____

Attachments: I. Enforcement Confidential Addendum
II. Detailed Contractor Cost Estimate
III. Administrative Record

cc: E. Watkins, 5202G0
Don Henne, U.S. Department of the Interior
Custom House, Room 217
200 Chesnut Street
Philadelphia, PA 19106-2904
A. Parkinson, WDNr CERCLA Coordinator

bcc: A. Baumann, HSRL-6J
R. Powers/ HSE-GI
R. Karl, HSE-5J
J. Cisneros, HSE-5J
D. Bruce, HSE-5J
L. Fabinski, ATSDR-4J
O. Warnsley, HSRLT-5J
T. Lesser, P-19J
D. Crume, MF-10J
EERB Read File (M. Johnson)
EERB Delivery Order File (M. E. Gustafson)
EERB Site File (Earl Brenneman, WMD Record Center, 7th floor)
R. Dumelle, Contracting Officer
B. Benning, On-Scene Coordinator, HSE-5J
L. Johnson, Attorney, ORC, CS-3T
D. Dawley, Enforcement Specialist, HSE-5J
T. Poy, RPM, HSRW-6J

ENFORCEMENT ADDENDUM

Redacted - not relevant to the selection of the removal action.

ATTACHMENT II
DETAILED CONTRACTOR COST ESTIMATE
STL Site

PERSONNEL	\$ 5,000
EQUIPMENT	0
MATERIALS	0
SUBCONTRACTORS	20,000
TRANSPORTATION	0
DISPOSAL	<u>0</u>
TOTAL	\$ 25,000

ATTACHMENT III

INDEX TO THE ADMINISTRATIVE RECORD

STL Site

<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
05/06/94	Anderson, Y. E & E	Nabasny, G. EERB	Site Assessment	48
00/00/00	Benning, B., U.S. EPA	Karl, R. U.S. EPA	Action Memorandum (Pending)	